

Table 1:

Physical properties of the alumina spheres

Example		1	2	3	4
Specific surface	(m <sup>2</sup> /g)	197	198	195	201
Total pore volume	(ml/g)	0.46	0.47	0.45	0.47
Breaking strength	(N)	n.o.	33	125	142
Bulk density	(g/l)	764	748	752	743
Diameter	(μm)	394	772	1685	2077
Deviation from average diameter	(μm)	11	14	40	22
Standard deviation	(%)	2.8	1.8	2.4	1.1
Spheroidal shape					
Average value of $d_{max}/d_{min}$		1.015	1.012	1.039	1.039
Spheres of $d_{max}/d_{min} < 1.09$ (%)		99	99	99	99
Throughput	(kg of Al <sub>2</sub> O <sub>3</sub> /h)	1.8	6.0	6.1	11.4

n.o. = not observed.